

**United States Environmental Protection Agency
EPA New England
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September 10, 2003

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Public Information Repositories

RE: August 2003 Monthly Report
1.5 Mile Reach Removal Action
GE-Pittsfield/Housatonic River Site

Enclosed please find the August 2003 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.
Sincerely,

Dean Tagliaferro

1.5 Mile Reach Removal Action Project Manager

1. Overview

During August 2003, the Environmental Protection Agency (EPA), the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc., and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included construction activities associated with building of the temporary dam on the east side of the river channel. The work associated with setting up the gravity bypass system was completed and the system became operational. In addition, a transfer of NAPL-impacted materials from the stockpile management areas to an approved off-site facility was initiated.

2. Chronological description of tasks performed

Refer to Figure 1 for an orientation of the sheetpile cells and their respective locations.

By the end of July 2003, the construction of the temporary dam was underway. During the first week of August the construction of the temporary dam continued. The installation of the walkway on the west side of the temporary dam continued. Installation of cross bracing between the columns of the dam and the support columns on the downstream side of the dam was completed. Eighteen-inch riprap was placed on the riverbed on the upstream and downstream end of the dam. The riprap was placed up to six inches off the top of concrete of the dam as an erosion control measure.

Upon completion of the west side temporary dam construction activities, the upstream and downstream sheetpile cutoff walls of the isolation cell for the west side dam construction were removed. Once the river water was allowed to flow through the west side of the river channel, the upstream and downstream cutoff walls were installed for the isolation cell for the dam construction on the east side of the river. The dewatering of the isolation cell on the east side followed. Since this area was previously remediated, water within the cell was pumped over the sheetpile isolation cell wall and not sent to the water treatment system.

Temporary dam construction on the east side was initiated. Excavation to grade of the riverbed riprap along the pile cap sheetpiling was completed and the pile cap sheeting was cut to grade. The reinforcement bars and concrete formwork for the east side of the temporary dam were installed in preparation for the installation of the concrete pile cap. The pouring of the concrete pile cap on the east side of the dam was completed and appropriate concrete testing was performed.

Also during the final week of July, installation of the pipe restraint system downstream of Elm Street Bridge was initiated. The installation of the pipe restraint system downstream and upstream of Elm Street Bridge was completed during the first week of August. This entailed the installation of helical anchors at specified points along the riverbank with the use of an auger attachment on the end of an excavator bucket. Load testing of the anchors was initiated by using an excavator and a crane scale.

Other activities during the first week of August included the installation of the shotcrete onto the Lyman Street Bridge foundation riprap in Cell 1 and onto the drainage swale on Cell 11A riverbank on Parcel I8-23-6. The shotcrete under the Lyman Street Bridge was placed onto the riprap and on the upstream and downstream sides of the Lyman Street Bridge abutment to encapsulate any remaining contaminated material located in between the riprap. Shotcrete was placed in the drainage swale to facilitate drainage and ensure long-term stability of the riprap swale.

Miscellaneous activities during the first week of August included the clearing of trees and shrubs along the east and west riverbanks of Cell 13. Trees and shrubs were chipped and transported to the OPCAs for future use as temporary daily cover. Other activities included moving of sheetpile to the staging area adjacent to Building 68 stockpile management area for decontamination.

During the second week of August, temporary dam construction activities on the east side of the river were continued. The installation of the formwork for the pouring of concrete between the dam columns and the stop log channels was initiated. Grout was placed around the bottom stop log channels to seal the stop log channels to the headwall. On August 12 due to the heavy rain and increased river flows the east side temporary dam containment cell was flooded. When the river level fell below the top of sheetpile walls, dewatering of the containment cell was initiated by pumping the water over the sheetpile.

The construction of the west side walkway was completed and construction on the walkway on the east side of the dam was initiated.

Other activities during the second week of August included completing the construction of the decontamination pad on the staging area adjacent to Building 68 stockpile management area for the decontamination of sheetpile. Once the pad was built the decontamination activities were initiated. Clearing and chipping of trees and shrubs along the east and west riverbanks of Cell 13 continued.

During the third week of August temporary dam construction activities continued. The installation of the reinforcement bars and concrete formwork between the dam columns and the stop log channels on the east side of the dam was completed. The pouring of the concrete for the stop log channels was completed and concrete testing performed. Once the concrete was set, the concrete forms were removed. Concrete was also poured over the sheetpiling on the west bank to bring the dam height up to elevation 978.

The installation of the upstream trash racks for the dam was completed. The trash racks were built by installing H-piles across the river channel and attaching grates onto the H-piles. The installation of the walkway on the east side of the temporary dam was completed.

The load testing of all the anchors for the pipe restraint system by using an excavator and a crane scale was completed.

Other miscellaneous activities during the third week of August included the continuation of sheetpile decontamination activities. Removal of residual sediments from the water treatment

system modutanks was initiated. The material was solidified and transported to Building 63 stockpile management area.

During the final week of August the connection of the 54-inch HDPE pipe to the temporary dam was completed. The blind flanges from both ends of the pipe were removed prior to the connection of the pipe. The pipe was then connected to the spool pieces in the dam. Eighteen-inch riprap was placed under the pipe immediately downstream of the dam to assist in the support of the pipe.

Additional pipe restraint efforts were completed to ensure stability of the pipe. Collars were installed around the pipes tying the two pipes to one another. H-piles were also installed between the pipe to reinforce and secure the locations in which the collars have been tied onto the pipe.

The construction of the energy dissipater system at the effluent of the gravity bypass system was completed. Two eight foot by twenty foot metal plates were placed underneath the end of the 54-inch pipes and extending for approximately ten feet past the outfall of the pipe. Four rows of bin blocks with approximately two-foot spacing were then placed in the riverbed. Nine-inch riprap was placed around the bin blocks to prevent erosion of existing sediment.

Once both the restraint system and the energy dissipater were completed stop logs were placed in the west side of the dam, the slide gates were opened and the water was allowed to flow through the 54-inch pipe. Once the gravity bypass system was in place the dewatering of Cell 13 was initiated. The river water directly downstream of the dam in already remidiated areas was pumped over the dam and the water in areas within Cell 13 was dewatered down to a six-inch depth and rerouted downstream of the Elm Street Bridge. Several staff gages were installed in several locations along the river areas upstream of the dam to monitor the water levels and the effects of the gravity bypass system to the river.

Other activities that took place during the final week of August included the completion of the removal of residual sediments from the water treatment system modutanks and transportation of the material to Building 63 stockpile management area.

Since there were no excavation activities during the month of August, the water treatment system did not treat any water. Therefore the monthly sampling of the water treatment system for the month of August was not necessary. Air monitoring for particulate matter (PM10 sampling) and surface water turbidity monitoring was performed on a daily basis. The monthly PCB air-monitoring event was performed on August 29, 2003. Surface water sampling for total suspended solids (TSS) and PCBs was performed on August 6 and August 20, 2003. Sampling of Common Fill for chemical parameters was performed on August 4, 2003 and Common Fill Filter on August 5, 2003. Four PCB composite samples were collected from the sediment removed from the water treatment system modutank on August 18, 2003. Two samples of the material for non-PCB analysis were collected on August 21, 2003. PCB wipe samples were collected on the decontaminated sheetpile at a frequency of one sample for every ten sheets.

Geotechnical samples were collected for Common Fill, Common Fill Filter and Filter Stone. The results of the geotechnical testing are not included in the monthly reports but are contained in other submittals and are available upon request.

The transfer of NAPL-impacted materials from the Building 68 stockpile management area to the Seneca Meadows Landfill in Waterloo New York was initiated. The transfer of the materials was performed from August 27 and August 29, 2003. Paint filter tests were collected at a frequency of 1 per 10 trucks of material loaded (see Table 3 for a summary of material transported to the Seneca Meadows Landfill during the month of August 2003).

The vibration monitoring activities continued at the two structures (the Laundromat and the manual car wash) on Parcel I8-23-6. (See Figure 1 for the locations of the Vibration Monitors).

Dust control procedures continued for access roads, parking areas, and material storage areas. In addition, staged backfill materials were covered to prevent the generation of dust.

3. Sampling/test results received

Non-PCB sample results for the water treatment system sampling program were received for samples collected on July 16, 2003 (Table 4). Analytical results for backfill materials are summarized in Table 5. This includes the sampling results for Common Fill samples collected on August 04, 2003 as well as Common Fill Filter samples collected on August 05, 2003. The results of the daily particulate air monitoring program are summarized in Table 6. Table 7 is a summary of daily turbidity monitoring results. Results for PCB and TSS samples and water column monitoring data collected on July 17, 2003 and August 06, 2003 are presented in Table 8. PCB and TSS results for water monitoring samples collected on August 20, 2003 are not yet available. A summary of samples collected for the air sampling conducted on August 29, 2003 is provided in Table 9; however the PCB data for the samples is not yet available. Table 10 contains PCB data associated with the decontaminated sheetpile confirmatory wipe samples. Table 11 presents the analytical data associated with Cell 11A NAPL-impacted sediment stockpile samples collected on July 16, 2003 and NAPL-impacted stockpile sample collected in Cell 12A on July 17, 2003. Results for the disposal characterization samples collected from the sediment removed from the water treatment system modutank on August 18, 2003 and August 21, 2003 are not yet available

4. Diagrams associated with the tasks performed

Figure 1 is a map of Phase I and the beginning of Phase II and includes layout of all excavation cells, temporary dam, lot parcel identification numbers, water monitoring locations, PCB air sampling locations, vibration monitoring locations, access road locations, fence line location, the water treatment system pad location, the effluent discharge location, and the utility trench location.

5. Reports received and prepared

Weston received a vibration monitoring summary report for the period of August 4, 2003 to September 2, 2003 from Vibra-Tech, Inc. During this period, two seismographs were set up on Parcel I8-23-6, one unit monitoring the Laundromat structure and the other unit monitoring the manual car wash structure. Both of the units were set up to collect data on continuous seismic mode. Activities occurring near the two monitoring locations during this period included normal background activities, sheet pile driving, and general construction activities. The maximum ground vibration level measured was 0.83 inches per second (ips), this was a single time occurrence. The maximum vibration level encountered during the month represents 41.5% of the state's recommended limit of 2.0 ips. All readings during this period comply with State Regulations.

6. Photo documentation of activities performed

See attached photos.

7. Brief description of work to be performed in September 2003

- Remove the temporary dam isolation cell on the east side of the river.
- Continue dewatering of the west side of the river (Cell 13).
- Install the sheetpile wall to separate the west side of the Cell 13 from the east side.
- Excavate and backfill west side of Cell 13.
- Initiate the installation of the retaining wall on the toe of the west riverbank in Cell 13.
- Complete the transport of NAPL-impacted materials to an approved off-site disposal facility.
- Potentially transfer TSCA and non-TSCA material to the OPCAs.
- Complete the sheetpile decontamination activities.
- Continue stockpile management activities at Buildings 63, 65 and 68.

- Continue operation of water treatment system.
- Continue daily air and turbidity monitoring.
- Continue PCB air sampling (once a month), water column sampling (twice a month), water treatment system sampling (monthly) and backfill material sampling (as needed).
- Initiated Vibration monitoring activities of the Elm Street Bridge and the Crib Wall, located immediately downstream of the Elm Street Bridge.

8. Attachments to this report

Table 1. Quantity of Bank and Sediment Material Excavated to Date

Table 2. Quantity of Material Transferred to OPCAs to Date

Table 3. Quantity of Material Transferred to Seneca Meadows, Waterloo, N.Y. During the Month of August

Table 4. NPDES non-PCB Sampling Results for Water Treatment System

Table 5. Backfill Material Testing Results

Table 6. Daily Air Monitoring Results

Table 7. Daily Water Column Turbidity Monitoring Results

Table 8. Summary of Turbidity, PCB, and TSS Water Column Monitoring Results

Table 9. PCB Air Sampling Results

Table 10. Sheetpile Confirmatory Wipe Sample Results

Table 11. NAPL-Impacted Sediment from Cells 11A and 12A Testing Results

Figure 1- Phase I Site Plan

Photodocumentation